

Abstract

A semiconductor device by embedded package has a good mechanical property for assembly on the machine, especially for installation on a vehicle.

The semiconductor device by embedded package can usually act as a power

5 diode and has a nail head having a bonding end and a leading conductor, and a

metal housing having a cavity inside. A bonding stage is formed on the metal

housing within the cavity. A semiconductor chip is installed on the bonding

stage with two sides connected to the nail head and the bonding stage

respectively. The bonding stage has a fence at the edge thereof. A well is

10 formed around the bonding stage inside the cavity thereof. The metal housing

has a inner side wall around the well and encloses the cavity.